

## REMARKS

Obviousness under §103 requires that the Office must (i) identify the individual elements of the claims and properly construe these individual elements,<sup>1</sup> and (ii) identify corresponding elements disclosed in the allegedly anticipating reference and compare these allegedly corresponding elements to the individual elements of the claims.<sup>2</sup> The factual determination of anticipation under 35 U.S.C. requires the identical disclosure, either explicitly or inherently, of each element of a claimed invention.<sup>3</sup>

Rejections on obviousness grounds under §103 cannot be sustained by merely conclusory statements regarding the reasons to combine references; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.<sup>4</sup> Moreover, this analysis should be made explicit.

Claims 1-3, 12, and 25-28 are pending in the application. All pending claims are rejected under 35 USC §101 as being directed to nonstatutory subject matter. All pending claims are rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 6,952,682 to Wellman (hereinafter “WELLMAN”) in view of U.S. Patent No. 6,317,727 to May (hereinafter “MAY”).

With this Reply, Claims 1-3 and 25-27 are canceled, Claims 12 and 28 are amended to address the rejection under 35 USC §101. Claims 29 and 30 are added to reformat the limitations of Claims 1 and 2 (including limitations previously included in each preamble) into a form compliant with 35 USC §101.

Further, as described in detail below, the combination of WELLMAN and MAY do not render Claims 12 and 28 unpatentable under 35 USC §103(a) at least for the following reasons.

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<sup>1</sup> Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1567-68 (Fed. Cir. 1987) (In making a patentability determination, analysis must begin with the question, "what is the invention claimed?" since "[c]laim interpretation, . . . will normally control the remainder of the decisional process"); see Gechter v. Davidson, 116 F.3d 1454, 1460 (Fed. Cir. 1997) (requiring explicit claim construction as to any terms in dispute).

<sup>2</sup> Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984).

<sup>3</sup> In re Rijckaert, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993).

<sup>4</sup> KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1741 (2007)(quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

- The OA does not identify, and WELLMAN and MAY do not include, all the limitations of Claims 12 and 28.
- The OA gives merely conclusory statements regarding combining WELLMAN and MAY with respect to the Claims 12 and 28. The OA does not articulate reasoning with some rational underpinning to support the legal conclusion of obviousness.
- A person having ordinary skill in the art of the invention would not combine WELLMAN and MAY because WELLMAN and MAY disclose incompatible systems that teach away from each other.

*Regarding Rejection of All Pending Claims under 35 USC 101*

The OA asserts that Claims 12 and 28 consist of:

... method steps <that> ... are not tied to a machine ...

The OA asserts that:

... to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps ...

Claims 12 and 28 have been amended to comply with 35 USC §101 by reciting the electronic system, processor, and processor instructions (memories were already recited in the original claim) that accomplish the method steps. Support for this amendment can be found throughout the original specification with reference to “processor instructions” (e.g., P03 L19 *et seq.*) performing steps of the invention that can be embodied in an “electronic system” (e.g., P09 L06 *et seq.*).

Regarding Rejection of Claims 12 and 28 as Unpatentable under 35 USC 103(a) Over WELLMAN in View of MAY

**The OA does not identify elements in the references corresponding to all the limitations of each of Claim 12 and Claim 28.**

First, the OA asserts, at OA P08 (*italic* emphasis in the original):

Regarding Claim 12, Wellman discloses ... a portion of the data structure corresponding to at least one edge between exchange definitions having at least partially compatible terms (*figure 8, a graph includes buyer nodes, seller nodes and an edge links between each buyer and seller node*) ;

the at least partially compatible terms including at least one of: an underlying, a start date, an end date, a variance (*column 4, lines 1-12, a multi-attribute bid includes a price, qualify characteristics, the time and location of delivery*) .

WELLMAN's description of Figure 8 at WELLMAN C09 L51-56 clearly states:

An edge between a buyer and a seller represents the highest surplus or the best matching pair of bids between the corresponding buyer and sell. Further, the edges have weights or values equal to the surplus of the corresponding best matching pair of buyer and seller bids determined in 55 step 710 9as shown in FIG. 7).

WELLMAN's further explains at WELLMAN C09 L21-22:

The surplus is the difference between the buyer price and the seller price for a given 20 matching buyer-seller pair of bids, the seller price being less than or equal to the buyer price.

Thus, edges in WELLMAN are based on the highest difference between the buyer price and seller price, not on an underlying, a start date, an end date, or a variance, as recited by Claim 12. For at least this reason, the OA does not state a *prima facie* case of unpatentability because

Second, the OA asserts at OA P08 (*italic* emphasis in the original):

Regarding Claim 12, Wellman discloses ... determining data corresponding to a linear combination of edges corresponding to a maximum notional amount for the graph

with respect to one or more exchange definitions (figure 9 and column 10, lines 17-55, the maximal weighted matching includes edges such that the combination of the best matches between buyers and sellers results in a highest overall surplus).

WELLMAN's description of Figure 9 at WELLMAN C10 L25-30 clearly states:

A matching combination having the largest sum of the weights among all the possible matching combinations is the maximal weighted matching. Thus the highest overall surplus is a sum of the weights of the edges of the maximal weighted matching.

Because WELLMAN's surplus represents the difference between the buyer price and the seller price, not a notional amount, WELLMAN's maximal weighted matching is not a “*maximal notional amount for the graph with respect to one or more exchange definitions*” as required by Claim 12.

**The OA does not explicitly articulate reasoning with some rational underpinning to support the legal conclusion of obviousness with regard to either claim.**

Finally, as the only reasoning to support the legal conclusion of obviousness, the OA asserts at P08:

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Wellman's to incorporate the features taught by May above, for the purpose of finding the perfect matching counterparties in swap transactions.

Note the form of this rationale for combining the references:

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify <Reference 1> to adopt the features taught by <Reference 2> above, for the purpose of <utility of the invention>.

Under this rationale, any truly patentable combination of known elements (hence pretty much every single invention ever conceived) would be unpatentable. Given these merely

conclusory statements, the Final OA does not articulate reasoning with some rational underpinning to support the legal conclusion of obviousness.

**A person having ordinary skill in the art of the invention would not combine WELLMAN and MAY because are WELLMAN and MAY disclose incompatible systems that teach away from each other.**

WELLMAN describes a system for determining a maximal weighted matching of a weighted bipartite graph in which the weights are the largest difference between the buyer price and the seller price. WELLMAN at C09 L18-55; C10 L18-30. MAY, on the other hand, is directed to a system that does not automatically match based on prices. MAY at C09 L24-27 ("This is a significant difference from the prior art systems in which orders are automatically matched if the prices are equal because such prior art systems typically limited the user's control over the order flow.") Similarly, WELLMAN is directed to auctions for goods and services (see, e.g., WELLMAN at C04 L01-05) while MAY is directed to credit screening for electronic trading of securities (MAY at C05 L40-47).

For at least these reasons, the undersigned requests withdrawal of the rejection of all pending claims under §103.

**CONCLUSION**

The foregoing is submitted as a full and complete response to the OA mailed 10/16/2008. With consideration of the above remarks, the undersigned submits that this application is in condition for allowance, and such disposition is earnestly solicited.

The OA contains characterizations of the claims and the references with which the Applicants do not necessarily agree. Unless expressly noted otherwise, Applicants decline to subscribe to any statement or characterization in the OA. In discussing the specification, claims, and drawings in this Reply, it is to be understood that Applicants are in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification and/or shown in the drawings. Rather, Applicants are entitled to have the claims interpreted to the maximum extent permitted by statute, regulation, and applicable case law.

**The undersigned requests: 1) an in-person interview at the Examiner's earliest convenience to identify and resolve any issues impeding examination of the application.**

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 14-1437, and please credit any excess fees to such deposit account.

Respectfully submitted,

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